

REMARKS

These comments are responsive to the Official Action mailed on Office Action mailed on July 19, 2004. The Office Action rejected independent claims 1, 12, 19, and 26, along with dependent claims 2-5, 8 and 10, under 35 U.S.C. § 102(e) as being anticipated by Araki et al. (Pat. No. 6,525,952), and rejected claims 3, 6, 7, 9, 11, 13-18, 20-25, 27, and 28 under 35 U.S.C. § 103(a) with Araki et al. as the primary reference. Claims 1, 3, 12, and 15-28 have been cancelled; new independent claims 29 and 33 and new dependent claims 30-32 and 34-36 have been added; and the several claims have had their dependence changed from now cancelled claims to newly added claims. For the reasons given below, it is believed that all of the currently pending claims are allowable over the prior art.

Section 1 of the Office Action

Concerning the comments in section 1 of the Office Action, the specification has been amended to insert the requested patent numbers. As to comments on double patenting, it is noted that all of the claims referred to in this paragraph are dependent claims, which (if not cancelled) now have either newly added claim 29 or 33 as their base claim. As such, the claims specified in the Office Action all add additional detail to underlying claims that are not believed to have any double patenting issues.

Section 2 of the Office Action

Concerning the requests of section 2 of the Office Action, the waving of the fee and certification requirements of 37 CFR section 1.97 are appreciated; however, it is believed that all of the relevant prior art known at this time has been submitted.

As discussed below in more detail, the newly added claims are drawn to aspects of the present invention as shown in Figures 6A and 7.

Pending Claims

The claims currently pending are new claims 29-36 and previously presented pending dependent claims 2, 4-11, 13, and 14. The only currently pending independent claims are newly added claims 29 and 33. Some of the claims pending before have been amended to have their dependence changed so that all of their base claims is one of either independent claim 29 or 33.

Newly added independent claims 29 and 33 are drawn to aspects of the present invention illustrated in Figures 6A and 7; more specifically, the concurrency of operations shown between times t1 and t2 and between times t2 and t3. It is believed these aspects, particularly in combination, are neither found in nor obvious from the prior art. New claims 29-36 are all drawn to these aspects, with claims 30 and 34 specific to Figure 6A and claims 31 and 35 specific to Figure 7. These figures are described in the present application beginning at paragraph [0048].

In particular, none of the previously pending claims were drawn to the concurrency of operations shown between times t1 and t2; although (now cancelled) claim 3 recited multiple buffers on the controller, the concurrency of data transfers using these buffers recited in claims 29 and 33 was not found in the original claims. The Office Action rejected claim 3 using Katayama et al. (6,317,371) as a secondary reference. Although the Katayama reference does describe two data buffers in the controller, these are for the very specific use allowing ECC operations to be performed on one set of data in a first of the buffers in parallel with receiving a second set of data in the second buffer. It respectfully submitted that neither Katayama nor the other cited prior art, either alone or taken together, teaches or suggests the final element of claim 29: "wherein, concurrently with the transferring of data from one of said data buffers to the second of the data storage sections, host data from external to the memory system can be received into the other of said data buffers."

Therefore, it is respectfully submitted that independent claims 29 and 33 contain features that are neither found nor suggested in the prior art, whether taken alone or together, and are not obvious based upon the prior art. Consequently, it is believed that claims 29 and 33, along with dependent claims 2, 4-11, 13, 14, 30-32, and 33-36, are allowable.

There are a number of reasons why the various pending dependent claims are believed to be further allowable over the prior art and why the rejections of the Office Action for these claims are not well founded. However, as these claims all have claim 29 or claim 33 as their base claim, there are believed allowable for this reason and the various additional reasons will not be presented at this time. However, it should be noted that in its rejection of claims 7, 9, 11, 13, and 14, the Office Action relies upon Mangan et al. (6,570,785) as a secondary reference; but as this reference is commonly assigned with, and was concurrently co-pending with, the present application, it is not applicable as prior art against the present application (35

U.S.C. § 103(c), § 102(e)): consequently, these rejections are not well founded and should additionally be withdrawn on this basis alone.

Conclusion

For the reasons above, it is believed that claims 2, 4-11, 13, 14, and 29-36 are allowable over the prior art. Reconsideration of claim 2, 4-11, 13, and 14, and consideration of new claims 29-36, and an early indication of their allowability and an early indication of their allowance are earnestly solicited.

Respectfully submitted,

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